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# THE POSITION AND THE CHARACTER OF THE LARGE-SCALE FARMING IN THE UNITED STATES (II)—FROM FAMILY FARMS TO CAPITALISTIC FARMS—

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# THE POSITION AND THE CHARACTER OF THE LARGE-SCALE FARMING IN THE UNITED STATES (II)

## —FROM FAMILY FARMS TO CAPITALISTIC FARMS—

*By* Isshin NAKANO\*

### V Classification of U. S. Farms—Various Theories

So far, we have reviewed in detail the trend of evolution of the farms in USA during the sixties, which confirms the fact that a large number of farmers have dropped out of agriculture and increasingly larger share of the production is concentrating to fewer, large scale farms. We have also seen that the trend is strengthened by the Federal Government payments concerning production adjustment and price-support of the principal crops. A pertinent question that could be asked at this stage would be as to the definition of characters of the fewer large scale farms as a social class. This is the principal theme of the second part of this thesis.

#### (1) Various Classifications of U. S. Farms

A number of researchers have studied the problem of classification of U. S. farms utilizing the agricultural censuses and other available materials. As we have seen in the beginning, the question of scale and character of family farms versus large-scale farms, and definition of the classification, have been subject to a controversy which has given rise to many conflicting opinions and theories. Prior to examination of this problem, it would be worth while to introduce those conflicting opinions relating to classification of the post-war U. S. farms.

R. L. Mighell, who analyzed the 1950 Census of Agriculture, classified 3.7 million commercial farms into three categories: (a) "large-scale farms" with sale of farm products of \$25,000 or more, (b) "family-scale farms" with sales between \$1,200~\$25,000, and (c) "small-scale farms" who sell products between \$250 to \$1,200. It might be noted that according to the census, there were 1,673 thousand farms in 1950 in addition to the commercial farms. These were "part-time farms", "residential farms" and "unusual farms". Mighell considered those selling products more than \$25,000 as large-scale farms which accounted for only 103 thousands or 2.8% of the total commercial farms. He included those farms with sales of products varied from \$1,200 to \$25,000 into the category of family-scale farms and estimated their number to be 2,886 thousands or 80%

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of the total commercial farms (717 thousand farms, or 19% of the total, were small-scale farms).<sup>1)</sup>

Another researcher, J. V. McElveen, used the 1954 Census and classified about 3.1 million commercial farms into "large-scale farms" (with sales of \$25,000 or more) and "family farms". The latter in turn was classified into "family-scale farms" (\$2,500~\$25,000) and "small-scale farms" (\$250~\$2,500). As for noncommercial farms (1,682 thousands), they were classified into 1,507 thousand "part-time/residential farms" and 175 thousand "subsistence farms". McElveen defined the large-scale farm as "those with a size of output larger than would ordinarily be handled by an able-bodied farm operator and member of his family". According to this criteria, he classified 134 thousand farms who sold in 1954 more than \$25,000 into the "large-scale farm" category, and all the rest of commercial farms—2,966 thousands who turned out less than \$25,000 per farm—were put into the family farm category. McElveen also made adjustments of the earlier census figures in consideration of the classification criteria and of changes in prices received by farmers, and pointed out that while between 1930~1954, both the large-scale farms and the family farms had decreased in number (from 205 thousands to 134 thousands in the case of large-scale farms and from 4,518 thousands to 2,966 thousands in the case of the latter), their respective shares in the total commercial farms had about same proportion at 5% and 95% which, he stressed, would prove that supremacy of the family farm had remained unshaken during the long period of time.<sup>2)</sup>

R. Nikolitch carried a step forward the thinking of McElveen. He defined a family farm as "an agricultural business in which the operator is a risk-taking manager who, with his family, does more than half of the farm work" and, on such a ground, he estimated the family labor supply on the average farm in U. S. to be about 1.5 man-years. And he classified farms using more than 1.5 man-years of hired labor as "larger-than-family farms" and conversely, all the rest—those using less than 1.5 man-years of hired labor—as "family farms".<sup>3)</sup> According to his estimate based on the analysis of the hired labor expenditures, number of "larger-than-family farms" decreased from year to year—from 264 thousands in 1950 to 168 thousands in 1959 and to 157 thousands in 1964. In 1964, they accounted for only 5% of all farms (3,153 thousands) and the rest—95%—were all family farms.<sup>4)</sup> Mighell and McElveen both meant "family farms" to be "commercial farms" only, but Nikolitch defined family farms as those including "part-time farms" and "part-retirement farms" (that is all farms with the only exclusion of "larger-than-family farms"). For the year 1950, for which all of the three researchers estimated the number of "family farms", there were 2,886 thousands according to Mighell and 3,310 thousands according to McElveen, where as Nikolitch estimated there were 4,641 thousand family

1) R. L. Mighell, *American Agriculture: Its Structure and Place in the Economy*, 1955, pp. 43-46, pp. 108-111.

2) J. V. McElveen, "Family Farms in a Changing Economy", *Agriculture Information Bulletin*, No. 171, Mar. 1957, p. 19, pp. 49-61.

3) R. Nikolitch, "Our 31,000 Largest Farms", *Agricultural Economic Report*, No. 175, Mar. 1970, p. 38.

4) R. Nikolitch, "Family-Operated Farms: Their Compatibility with Technological Advance", *American Journal of Agricultural Economics*, Vol. 51, No. 3, Aug. 1969, pp. 532-534.

farms.<sup>5)</sup>

On the other hand, what are the classification approaches of those Marxist researchers in the United States who are against the theory of family farm supremacy? Although a little outdated, we shall review briefly the classification of A. Rochester and V. Perlo.

Upon her analysis of the 1950 Census, Rochester distinguished four classes as follows: (a) "large farms" whose sales is larger than \$10,000, (b) "upper medium-sized farms" with sales ranging from \$5,000 to \$10,000, (c) "lower medium-sized farms" whose sales is between \$1,200~\$5,000, and (d) "very small farms" with sales of \$1,200 or less. For 1950, she considered that there were 9% large farms, 13% upper medium-sized farms, 33% lower medium-sized farms and 44% very small farms. On the basis of comparison with the previous censuses taking into consideration changes in classification standards and price levels of crops, Rochester observed that while the family farms (upper and lower medium-sized farms) decreased from 4.2 millions in 1930 (68% of total farms) to 3.9 millions in 1950 (66%), large farms doubled in number from 236 thousands (3.9%) to 484 thousands (9.0%) during the same period, which showed capitalistic development of the U.S. agriculture.<sup>6)</sup>

V. Perlo, who analyzed the data of the 1950 Census for the "Old South", made the following classification: (a) "rich farmers" (value of farm products sold \$10,000 or more excluding, however, sharecroppers—do.), (b) "middle farmers" (\$2,500~\$10,000), (c) "poor farmers" (\$1,200~\$2,500, and commercial farms with sales of \$250~\$1,200), (d) "worker-farmers" (non-commercial farms with sales \$1,200 or less), (e) "sharecroppers", and (f) "farm wage laborers".<sup>7)</sup>

As for the classifications used by the U.S.S.R. experts on American agriculture, E. Sollertinskaya, who analyzed the 1950 Census, distinguished U.S. farms into capitalist and non-capitalist farms, and considered all farms with sales of \$2,500 or more as the capitalist farms (she called "large-scale farms (крупные фермы)" those who had sold farm products in excess of \$10,000). According to her, almost 40% of the U.S. total farms in 1950, or 2.1 millions, were capitalist farms, and the number is far above those proposed by Rochester and Perlo as capitalist farms.<sup>8)</sup>

5) *Ibid.*, p. 534, J. V. McElveen, *op. cit.*, p. 72. Incidentally, we might also take a look at the classification made by E. Higbee which differs considerably from those of the three researchers who claim the supremacy of family farms. Taking the 1959 Census, he first classified the U. S. farms into three categories, viz., (1) the First Class with sales of farm products of \$20,000 or more, (2) the Middle Class with sales ranging from \$2,500 to \$20,000, and the Third Class, whose sales is less than \$2,500. Higbee then made sub-classifications as follows: the First Class consists of four groups—(i) Elite (sales of farm products of \$500,000 or more), (ii) Junior Elite (\$100,000~\$500,000), (iii) Blue Ribbon (\$40,000~\$100,000) and (iv) Remainder of the First Class (\$20,000~\$40,000); the Middle Class was divided into Upper Middle Class (\$10,000~\$20,000) and Lower Middle Class (\$2,500~\$10,000). See, E. Higbee, *Farms and Farmers in an Urban Age*, 1963, pp. 45-54, p. 155.

6) A. Rochester, *Why Farms are Poor*, 1940, pp. 71-73, do., *Lenin on the Agrarian Question*, 1942, p. 216, translated by Harumaro Inoue and Ken Minamida, *Introduction to the Agriculture—Teaching of Lenin*, Vol. II, 1956, pp. 386-387. The figures for 1950 were supplied by Rochester herself in a letter to the Japanese translators.

7) V. Perlo, *The Negro in Southern Agriculture*, 1953, pp. 53-54, pp. 60-62.

8) Е. Соллертинская, "Экспроприация мелких и средних фермеров и концентрация производства в сельском хозяйстве США", *Вопросы экономики*, февр. 1955, стр. 114-117.

V. A. Martuinof distinguished the farms covered by the 1959 Census into four categories as follows: (a) "capitalist farms" (large than \$10,000 in value of farm products sold), (b) "small capitalist farms" (мелкокапиталистические фермы, \$5,000~\$10,000), (c) "medium-scale farms" (средние фермы, \$2,500~\$5,000), (d) "small and very small farms" (мелкие и мельчайшие фермы, \$2,500 or less) and estimated that in 1959, 794 thousand farms (21% of the total) were capitalist and 653 thousands (18%) were small capitalist farms.<sup>9)</sup>

M. A. Menshikova, who analyzed the 1964 Census, attaches the importance to the fact that since 1959, business deteriorated for those farms with the sales ranging from \$10,000~\$20,000 and the number of farms in this economic class started to decrease, for the first time, between 1959 and 1964, and points out that today, those about 400 thousand farms with sales of \$20,000 or more constitute the "large capitalist superstructure (крупнокапиталистическая верхушка)" of U. S. agriculture.<sup>10)</sup>

Thus, the Soviet researchers give emphasis on the capitalistic development of U.S. agriculture and tend to exaggerate the number of capitalistic farms in comparison with those American scholars as well as Japanese scholars to be introduced later, but their criteria of capitalistic farms are not always very clear.

With regard to the Japanese scholars, we must not forget K. Suzuki, who started his research into U.S. agriculture soon after the World War II. He followed more or less the approach of Rochester and classified those U.S. farms in 1950 into "large farms" (sales of farm products in excess of \$10,000), "medium-sized farms" (\$2,500~\$10,000) and "small/poor farms" (\$2,500 or less).<sup>11)</sup>

A. Futami, in his classification of peasant farms using the 1954 Census, adopted the categories of rich, middle and poor peasants. A farm with sales of \$10,000 or more was "capitalist farmers" and "rich peasants", and the "middle peasants" were those selling products between \$2,500~\$10,000, while "poor peasants" had value of products sold \$2,500 or less (Futami excluded, however, those part-time or residential farms whose off-farm income were larger than their farm income from the "poor peasant" category, even if they sold farm products less than \$2,500). His analysis of the 1959 Census, however, adopted a different classification of peasant farms as follows: big, middle and small peasant farms. And he classified 3.7 million U.S. farms in that year into the following six groups: (a) "capitalist and big peasant farms" (sales of \$40,000 or more), (b) "middle peasant farms" (\$20,000~\$40,000), (c) "small peasant farms" (\$5,000~\$20,000), (d) "dwarf peasant farms" (all farms selling products \$2,500~\$5,000 or commercial farms selling \$50~\$2,500), (e) "part-time laborers" (those part-time farms with value of sales \$2,500 or less), and (f) "other farms" (those part-retirement farms and abnormal

9) В.А. Мартынов, М.А. Меньшикова и А.И. Тулупников, *Структурные сдвиги в сельском хозяйстве США*, 1965, стр. 15-18.

10) М. А. Меньшикова, "Совершенный этап развития сельского хозяйства США", Ю. П. Лисовский (ред.), *Развитые капиталистические страны: проблемы сельского хозяйства*, 1969, стр. 223-224.

11) Keisuke Suzuki, "Capitalism in Agriculture and Dissolution of Farmers—an Essay on the Analysis of U. S. Agriculture", Hiromi Arisawa (ed.), *Modern Capitalism*, Vol. 4, 1959, pp. 176-178.

farms). According to Futami, U.S. farms in 1959 consisted of 2.8% of capitalist and big peasant farms), 6% of middle peasant farms, 31% of small peasant farms, 26% of dwarf peasant farms, 24% of part-time laborers, and 11% of other farms.<sup>12)</sup>

On the other hand, T. Ouchi, who is considered one of the foremost of family-farm protagonists in Japan, used the 1959 and 1969 Censuses to classify U.S. farms in the following manner: for the 1959 Census, he considered rich peasant farms those with more hired workers than family workers; actually, a farm was classified as "capitalist farm" if it had more than 10 regular hired workers, and as "rich peasants" when it had 3 to 9. All the rest were either "small peasant farms or inferior" category. According to this criteria, of the total 3.7 million farms in 1959, 7 thousands (0.2%) were "capitalist farmers" and 40 thousands (1.1%) were "rich peasants", whereas the rest (98%) were assumed to be small peasant farms or below.<sup>13)</sup> As for the 1969 Census, Ouchi changed his criteria of "capitalist farms" which he now defined are those who employed five or more regular hired workers rather than ten and "rich peasants" employing 3 to 4 respectively; he considers that of the total farms, 0.6% with sales of farm products of \$200,000 or more (16 thousands in number) were "capitalist farms", 4% were "rich peasants" while all the rest—95%—were either small peasant farms or below.<sup>14)</sup>

The author also tried to classify U.S. farms on the basis of his analysis of wage expenditures in the 1964 Census, and in doing so, he referred to the methodology of R. Nikolitch mentioned earlier. Actual wage expenditure was used to estimate average number of regular hired workers per year, and the number was then used as criteria for classification into four categories as follows: (a) "capitalist farmers" turning out more than \$40,000, (b) "rich peasants" selling products between \$20,000~\$40,000, (c) "middle peasants" (\$5,000~\$20,000) and (d) "poor peasants and rural laborers" (less than \$5,000). In 1964, according to this classification, there were 4.5% capitalist farms (142 thousands), 8% rich peasants (260 thousands), 31% middle peasants (970

- 12) U. S. D. C., *U. S. Census of Agriculture 1959*, 1962, Vol. II, pp. xxxiv-xxxv, Akira Futami, "Growing Contrasts among the American Farmers in the Post-War Period", *Economic Theory*, Vol. 51/52, Aug. 1959, pp. 114-127, do., *Structure of Modern Agriculture in U. S. A.*, 1965, pp. 100-109. When Futami made classification of farmers for the 1954 Census, he pointed out that in reality, the rich peasants (including capitalist farmers) comprised mainly those with sales of \$25,000 or more and the upper farms of \$10,000~\$25,000 group, while the middle peasants consisted of the lower farms of \$10,000~\$25,000 group, \$5,000~\$10,000 group and the upper farms of \$2,500~\$5,000 group, and the poor peasants were the rest.
- 13) Tsutomu Ouchi, *American Agriculture*, 1965, pp. 332-333. In addition, K. Baba, although his methodology is similar to Ouchi, estimates that more than 40 thousand farms in the 1959 Census were "capitalist farmers" and 256 thousands were rich peasants and therefore gives a much larger weight to the capitalistic farms. (Koji Baba, "Agricultural Problems in Modern Capitalism", Tsutomu Ouchi, (ed.), *Agricultural Economics*, 1967, pp. 246-253)
- 14) Tsutomu Ouchi, *Modern Agriculture in U. S. A.*, 1975, pp. 135-137. With regard to his analysis of the 1969 Census, it is not clear why he altered the criteria of "capitalist farms". At any rate, he maintains the trend of "enlarging the scale of small peasant farms". One wonders how he would explain the fact that the number of capitalist farms—which his analysis sorted out—practically doubled from 7 thousands to 16 thousands (0.2% to 0.6%) in ten years from 1959 to 1969.

thousands) and 56% poor peasants and rural laborers (1.6 millions).<sup>15)</sup>

In his analysis of "the large-scale farms" based on the 1969 Census, Ouchi criticizes extensively the author's classification of farms in 1964 as already referred to.<sup>16)</sup> To be sure, inasmuch as their basic concepts of class-differentiation of peasantry are different, there is nothing surprising in such a divergence of opinions, and it is certainly not the purpose of the present thesis to take up the problem, except that it would be worth-while to review main points of methodological difference relating to class definition and classification of farmers between Ouchi and the author. In the latter's opinion, there are three such points of difference as follows:

Firstly, the most essential problem in classification would be the actual degree of employment of hired workers as it concerns definitions such as, for instance, capitalist farm, big peasant farm, middle peasant farm, small peasant farm, etc..

The second point would be the question of number of family workers per farm today. When we distinguish a farmer-group in which the number of hired workers is greater than that of family workers, the number of farms which belongs to that particular category would largely depend on the average number of family worker per farm to be estimated.

The third point concerns seasonal fluctuations of farmwork. As we have already seen in the first part of the thesis, there is a stronger trend that the employment of hired workers concentrates to specific season and specific types of farmwork more and more as the use of agricultural machinery advances. For this reason, it is very difficult today to distinguish class characteristics of U.S. farms on the sole basis of number of hired workers. Consequently, it has become a common practice recently to estimate the scale of wage labor usage by converting use of seasonal hired workers into that of regular hired workers on the base of annual wage expenditures of U.S. farms. In this approach, while in estimating the average number of regular hired workers from the amount of wage expenditures, an important question arises as to what would be the reasonable estimate of average number of working-days per year for the regular hired workers, and this is in conjunction with the average number of days worked per year by year-round or regular hired workers in U.S.A., as well as that of family workers at large.

In the following part, the author will discuss the first point mentioned earlier. The second and the third point will be reviewed in detail in the separate chapter in connection with the classification method which the author has adopted in the present thesis.

## (2) Class Definition and Farmers' Classification of F. Engels and V. I. Lenin.

The author as well as Ouchi considers that degrees of the dependence on hired workers is the "basic criteria" in deciding class characteristics of a farm.<sup>17)</sup> The real problem is what degrees of dependence on hired workers will give a farm the capitalist enterprise character. Following the approach used by R. Nikolitch and many other U.S. advocates

15) Isshin Nakano, "The Agricultural Policies and the Capitalist Development of Agriculture in the United States", *The Kyoto University Economic Review*, Vol. 42, No. 1-2, Apr.-Oct. 1972, pp. 75-79.

16) Tsutomu Ouchi, *Modern Agriculture in U. S. A.*, p. 131, pp. 135-136.

17) *Ibid.*, p. 125.



of the supremacy of family farms, Ouchi draws a line of demarcation between the family farms and the "larger-than-family farms", where dependence on family labor is equal to that on hired labor (i.e., where the rate of dependence on hired labor is 50%). He considers this also as a de facto line of demarcation between "the small peasant farms in the exact meaning of the term" (i.e., middle peasants according to Lenin's classification of peasant farms of rich, middle and poor peasants) and the rich peasant or capitalist farms. As it is, Ouchi regards any farmer who depends less than 50% on hired labor as "small peasants or lower class of farms," and moreover, he calls those large-scale farms with high degree of concentration of farm products and means of production "enlarged small peasant farms" and includes them in the category of small peasant farms.<sup>18)</sup>

In his analysis of the 1964 Census of U.S. farms, the author understood the 50% demarcation line not as the one between rich peasant farms and middle peasant farms but as the border line between the capitalist farms and rich peasant farms. Which of the different views would be justified, Ouchi's or ours?

Since this is a matter which has a direct bearing on the definitions of classes in agriculture, we shall once return to the classical definitions formulated by F. Engels and V. I. Lenin which are reflected in Ouchi's theory as well.

It is well known that Engels, in his "The Peasant Question in France and Germany", defines the small peasant as "the owner or tenant—particularly the former—of a patch of land no bigger, as a rule, than he and his family can till, and no smaller than can sustain the family", and the big and middle peasants as those who "cannot manage without wage-workers".<sup>19)</sup>

Lenin, on the basis of those definitions by Engels, provided more practical definitions as follows in his "Preliminary Draft Theses on the Agrarian Question": (a) "agricultural proletariats" are "wage-laborers who obtain their livelihood by working for hire at capitalist agricultural enterprises", (b) "semi-proletarians" are those "who obtain their livelihood partly as wage-laborers at agricultural and industrial capitalist enterprises and partly by working their own or rented plots of land", (c) "small peasantry" are those "who either as owners or as tenants, hold small plots of land which enable them to satisfy the needs of their families and their farms, and do not hire outside labor", (d) "middle peasants" are "those small farmers who, (1) either as owners or tenants, hold plots of land.....; (2) quite frequently (for example one farm out of two or three) resort to the employment of hired labor", and finally, (e) "big peasants" are "capitalist entrepreneurs in agriculture, who as a rule employ several hired laborers and are connected with the 'peasantry' only in their low cultural level, habits of life, and the manual labor they themselves perform on their farms".<sup>20)</sup>

Furthermore, in his "Capitalist System of Modern Agriculture", Lenin distinguishes three groups as main groups of farms, namely, (a) proletarian farms, (b) peasant farms,

18) *Ibid.*, pp. 129-130, p. 138.

19) F. Engels, "The Peasant Question in France and Germany", *Karl Marx and Frederick Engels Selected Works*, 1970, Vol. III, p. 459, p. 473.

20) V. I. Lenin, "Preliminary Draft Theses on the Agrarian Question", *Collected Works*, 1966, Vol. 31, pp. 153-157.

and (c) capitalist farms, and formulated the capitalist farms as "farms with more wage-workers than family workers", and peasant farms (including the small, middle or big peasant farms) as those in which "the number of family workers in them is greater than that of wage-workers". Moreover he characterized the big peasant farm as the farm that "is not able to do without permanent use of wage-labor"<sup>21)</sup>. (author's underline)

Then, in using the degree of dependence on hired workers to determine characteristics of various classes of farmers, how did Engels and Lenin classified farms in various countries as capitalist, big peasant, middle peasant, small peasant or proletarian farm? Regrettably, there is nothing in Engels' work containing such a positive analysis, although Lenin did left some theses and notebooks in which he tried to make the classification of farms for Germany and some other European countries as well as for U.S.A..<sup>22)</sup>

In this thesis, we shall follow the preceding definitions to examine Lenin's analysis of German agriculture in 1907 with emphasis on the employment of hired workers, for which he made the classification in most exact manner..<sup>23)</sup>

To begin with, in his "Capitalist system of Modern Agriculture", Lenin presents the three main groups of farms in Germany of 1907: (a) the proletarian farms with farmland of less than 2 ha (59%), (b) peasant farms between 2~20 ha (36%) and (c) the capitalist farms exceeding 20 ha (5%). The peasant farms' category is further classified into three subgroups of (i) small peasant farms between 2~5 ha (17%), (ii) middle peasant farms between 5~10 ha (11%) and (iii) big peasant farms between 10~20 ha (7%).<sup>24)</sup>

Now, let us look at the respective shares of family workers versus hired workers for each of the classification. Table 1 represents the author's adjustment calculation of the original figures of statistics which Lenin utilized for his analysis of family workers and hired workers in the research mentioned earlier, and shows percentages of both factors as well as average number of workers per farm for each of the classification.

At that time, there were 15.2 million persons working on farms in Germany, of which 70% were family workers, and 30% were hired workers. Generally speaking, the ratio between regular versus temporary workers was about two to one, although for hired workers, the numbers were 2.5 millions for regular workers and 2.0 millions for temporary workers, which means that their shares were fairly close, and that seasonal hired workers had a large proportion in the total number of hired workers at that time.

21) V. I. Lenin, "Capitalist System of Modern Agriculture", *Collected Works*, 1963, Vol. 16, p. 432, p. 438.

22) For instance, apart from the "Capitalist System of Modern Agriculture", refers V. I. Lenin, "The Agrarian Question and the 'Critics of Marx' ", *Collected Works*, 1961, Vol. 5 and Vol. 13, "New Data on the Laws Governing the Development of Capitalism in Agriculture", *Collected Works*, 1964, Vol. 22, and "Notebooks on the Agrarian Question", *Collected Works*, 1968, Vol. 40, etc..

23) As for the United States, Lenin tried, in the "New Data" mentioned earlier and the relevant notebook, rough classification of American farms. For the year 1899, he classified as "capitalist farms" those farms with average wage expenditures of \$158~\$786 (with value of farm products of \$1000 or more), as "medium farms" the farms with wage expenditures of \$52 on the average (\$500~\$1000), and as "non-capitalist farms" those paying out less than \$18 (\$500 or less), but the classification stops there. (V. I. Lenin, *Collected Works*, Vol. 22, pp. 78-79, and *Collected Works*, Vol. 40, p. 435.)

24) V. I. Lenin *Collected Works*, Vol. 16, pp. 437-441.

Table 1. Family Workers versus Hired Workers in German Farms in 1907

		Total workers	Family workers			Hired workers		
			Subtotal	Regular	Temporary	Subtotal	Regular	Temporary
Actual numbers	Total	(100 Persons) 151,695	106,216	76,100	30,116	45,479	25,058	20,421
	Less than 0.5 ha	20,143	18,270	8,155	10,115	1,873	385	1,488
	0.5 ~ 2 ha	23,387	20,249	12,280	7,969	3,138	668	2,470
	2 ~ 5 ha	29,139	25,026	19,482	5,544	4,113	1,309	2,804
	5 ~ 10 ha	24,913	20,036	16,733	3,303	4,877	2,213	2,664
	10 ~ 20 ha	21,045	13,926	11,935	1,991	7,119	4,127	2,992
	20 ~ 50 ha	16,212	7,373	6,360	1,013	8,840	5,958	2,882
	50 ~ 100 ha	4,482	953	813	140	3,528	2,399	1,129
	100 ha or more	12,373	382	341	41	11,991	7,998	3,993
Percentage	Total	100.0%	70.0	50.2	19.8	30.0	16.5	13.5
	Less than 0.5 ha	100.0	90.7	40.5	50.2	9.3	1.9	7.4
	0.5 ~ 2 ha	100.0	86.6	52.5	34.1	13.4	2.8	10.6
	2 ~ 5 ha	100.0	85.9	66.9	19.0	14.1	4.5	9.6
	5 ~ 10 ha	100.0	80.4	67.2	13.2	19.6	8.9	10.7
	10 ~ 20 ha	100.0	66.2	56.7	9.5	33.8	19.6	14.2
	20 ~ 50 ha	100.0	45.5	39.2	6.3	54.5	36.7	17.8
	50 ~ 100 ha	100.0	21.3	18.2	3.1	78.7	53.5	25.2
	100 ha or more	100.0	3.1	2.8	0.3	96.9	64.6	32.3
Average number of workers per farm	Total	Persons. 2.64	1.85	1.33	0.52	0.79	0.44	0.36
	Less than 0.5 ha	0.97	0.88	0.39	0.49	0.09	0.02	0.07
	0.5 ~ 2 ha	1.81	1.56	0.95	0.62	0.24	0.05	0.19
	2 ~ 5 ha	2.90	2.49	1.94	0.55	0.41	0.13	0.28
	5 ~ 10 ha	3.82	3.07	2.56	0.51	0.75	0.34	0.41
	10 ~ 20 ha	5.10	3.37	2.89	0.48	1.72	1.00	0.72
	20 ~ 50 ha	7.18	3.27	2.82	0.45	3.92	2.64	1.28
	50 ~ 100 ha	12.28	2.61	2.23	0.38	9.67	6.57	3.09
	100 ha or more	52.50	1.62	1.45	0.17	50.88	33.94	16.94

Note: 1) According to Lenin's method, farm operators are included in the regular family workers category (See, *V. I. Lenin Collected Works*, Vol. 40, pp. 306-308, pp. 350-352).

Source: Landwirtschaftliche Betriebsstatistik, *Statistik des Deutschen Reichs*, Bd. 212. Teil 1, 1909, SS. 606-607.

New, let us take a look at the relative importance of family workers versus hired workers for each category. With regard to the lowest group among the proletarian farms (less than 0.5 ha), the number of temporary family workers is larger than that of regular family workers—in fact, the former accounts for more than 50% of the total persons working on farms. However, from those farms in 0.5 ha~2 ha group up to 10~20 ha group, regular family workers have the majority of total farm workers. The percentage of hired workers increase as the size of farm becomes larger, although the percentage of

family workers is greater than that of hired workers even in the 10~20 ha group which Lenin called big peasant farms. It is only with the group of farms exceeding 20 ha, or those called capitalist farms, that the number of hired laborers exceeds that of family workers. Finally, in case of few large-scale farms exceeding 50 ha, the number of regular hired workers exceeds 50% of total persons working on farms.

A comparison of average number of workers per farm for each group by size of farm in Table 1 shows another interesting trend. In the case of the proletarian and peasant farms up to 20 ha, average number of family workers continuously increases as we move up, and in parallel, the number of hired workers also increases. However, with 20~50 ha group farms, the number of family workers starts to decrease. This bears witness to the fact that when the size of farm exceeds 20 ha, the predominance of family worker gives way to hired workers with the result that the farm increases capitalistic character.

If we consider the relationship for each group of farms, we notice first of all that in the case of proletarian farms smaller than 2 ha, the number of family worker per farm is extremely small (0.9~1.5 persons) in comparison with the group who has more than 2 ha. Particularly, for the lowest group (less than 0.5 ha), average number of regular family workers is no more than 0.4, or less than that of temporary family worker. For what Lenin called the small peasant farms (2~5 ha group), average number of workers per farm is 2.9, of which 2.5 are family workers and hired workers accounts for no more than 0.4 (the number of regular hired worker is merely 0.1). In this class of farms, most part of farm work is done by the operator and his household member, and dependence on hired labor is practically zero. The next group of middle peasant farms (5~10 ha), 3 out of the average number of farm workers of 3.8 are family workers. Like the small peasant farms, they depend predominantly on family workers. However, as Lenin stated in his definition of the middle peasant farms that one out of every two or three farms uses outside labor, an average farm in this group employs 0.3 regular hired laborer and 0.4 temporary laborer, which would mean that on the average, one out of every three farms uses a regular hired worker and at least one out of every two farms uses a temporary hired worker.<sup>25)</sup>

It is only with the following group of big peasant farms (10~20 ha) that one regular hired laborer is employed per farm. As Lenin characterized big peasant farm as the one that "is not able to do without permanent use of wage-labor", they use, on the average, 1.0 regular hired laborer plus 0.7 temporary laborer per farm, which shows much larger dependence on hired labor in contrast to the middle peasant and smaller farms. However, even in this case, the weight of family workers is still much larger than that of hired workers (3.4 to 1.7 or roughly two-to-one) per big peasant farm (in fact, the ratio would become three-to-one if we take only those workers regularly employed).

Lastly, as for the capitalist farms (larger than 20 ha) according to Lenin's definition, we could either treat them as a single group (all farms above 20 ha) or classify them into

25) Lenin, after giving the definition of middle peasant farms in his "Preliminary Draft theses on Agrarian Question", gives the case of 5~10 ha farms in Germany as a practical example of middle peasant farms in advanced capitalist countries and states that approximately one-third of the farms in this group employs hired laborers in one way or another. (V. I. Lenin, *Collected Works*, Vol. 31, p. 156.)

two groups (20~100 ha farms and over 100 ha farms), but in the present analysis, we will divide the capitalist farms into three groups of 20~50 ha farms, 50~100 ha farms and those above 100 ha and see how each of them depends on hired labor. This is because we want to separate the 20~50 ha group which is directly adjacent to peasant farms, i.e., those farms which are considered the smallest group of the capitalist farms on one part, and by comparing their dependence on hired labor with that of the largest segment of peasant farms (i.e., big peasant farms), we hope to find out where Lenin tried to draw the demarcation line between the capitalist and peasant farms on the basis of the degree of dependence on hired labor in their respective group.

With regard to the first group of farms (20~50 ha), the average number of hired workers employed (regular and temporary) is 3.9, while the number of family workers is 3.3. Thus, the former is more important, and this is a decisive point which distinguishes these farms from big peasant farms who is one part of peasant farms. Nevertheless, the ratio of family workers is still very large, and if we exclude temporary workers, the regular family workers has still predominance (2.8) over the regular hired laborers (2.6), if at a narrow margin. Because of these characteristics, we may conclude that the 20~50 ha group is still retaining strong traces of peasant farms. At the same time, we should keep in mind the fact that Lenin still elected to include this group within the capitalist farms in spite of its peasant characteristics (if we treat all farms between 20 to 100 ha as a group as it is usual to do so, then the numbers of regular family workers and regular hired workers per farm will be 2.7 and 3.2 respectively, and it would be impossible to detect the traces of peasant features in the smaller members of this category as we have seen already).

As for the next group (50~100 ha farms), an average farm employs 6.6 regular and 3.1 temporary hired laborers, or nearly ten, while family workers occupy no more than 20% of the total workforce of the farm. In considering that a significant part of the family workers are devoted to business management or bookkeeping work, their actual weight in the physical labor would be even smaller.

Lastly, the largest farms (100 ha or more) employ more than 50 hired laborers (of which 34 are regular hired workers) per farm and constitute big-capitalist farms as represented by the Junkers, for which there is little need of further analysis in the present thesis.

Lenin thus demonstrated that the German agriculture at the turn of this century consisted of a vast pyramid. At the very top, there were about 23 thousand colossal farms employing more than 50 hired laborers each, and below the top, there were 285 thousand capitalist farms (5%), 413 thousand big peasant farms (7%), 653 thousand middle peasant farms (11%), 1.0 million small peasant farms (17%) and 3.4 million proletarian farms (60%) which constituted the bottom of the structure.

Until now, we have studied the classification of German farms proposed by Lenin in some detail, and at this point, the author would like to give the summary of our review to the extent it is necessary for the author's classification to be discussed in the following chapter.

Firstly, in 1907, average number of family workers used by German farms in the

proximity of boarder line between peasant farms and capitalist farms was slightly more than 3, and Lenin considered that when the weight of hired work exceeds that of family work in a farm, it becomes a capitalist operation, and also that a farm can be considered capitalistic when the average number of hired workers employed (including both of regular and temporary hired workers) exceeds 3 or 3.5.<sup>26)</sup>

Secondly, large peasant farms are those that "is able to do without permanent use of wage-labor" and on the average, they had one regular hired worker and some additional casual laborers.

Thirdly middle peasant farms, on the average, employed a hired laborer at the ratio of one to every two or three farms in that category. In the beginning of this century, one out of every three farms of this group employed a regular hired laborer, while one out of every two farms employed a temporary hired laborer in Germany.

Lastly, small peasant and proletarian farms had practically no hired laborer at all.

## VI Classification Methodology of Present U.S. Farms

As we have seen in the preceding chapter, a large number of viewpoints exist concerning classification of U.S. farms. Even among Marxist researchers, considerable difference accompanies their estimates concerning family farms and those which belong to larger categories. For example, with regard to the number of capitalist farms as of 1959, B. A. Martuinof estimates it to be 794 thousands (21% of the total farms),<sup>27)</sup> while the number, according to Ouchi, is only 7 thousands (0.2% of the total),<sup>28)</sup> or less than one percent of Martuinof's figure. In view of such a conflict, we are going to try our own classification of the U.S. agriculture towards the end of the sixties in the present chapter, and this following the class definitions and classification proposed by F. Engels and V. I. Lenin.

In analyzing agriculture of the advanced capitalist countries, Engels and Lenin classified farms using as criteria the scale of hired labor which serves as "the chief sign and indicator of capitalism in agriculture".<sup>29)</sup>

26) In the "Notebooks on the Agrarian Question", Lenin classified German farms in 1907 on the basis of the number of farm workers (including both of family workers and hired workers) because he felt that this method was "more rational classifications". In doing this, he defined (1) those farms which have only 1~3 workers as farms which are "almost without hired labor", (2) those farms using 4~5 workers as farms who employ "small minority of hired labor", and (3) those farms having more than six workers as a farm employs "majority of hired labor" respectively. The last group, obviously, means capitalist farms on account of his classification definition we have already studied. He included those farms employing more than six workers in "capitalist farm" category probably because he thought the average number of family workers to be three per farm, which means that in this group there are at least three hired laborers employed per farm. (V. I. Lenin, *Collected Works*, Vol. 40, p. 348, pp. 364-366.)

27) В.А. Мартынов, М.В. Меньшикова и А.И. Тулупников, *там же*, стр. 15-18.

28) Tsutomu Ouchi, "American Agriculture", p. 332.

29) V. I. Lenin, *Collected Works*, Vol. 22, p. 101.

In Lenin's study of German agriculture in 1907, in which he attempted to classify farms, the basic criteria of classification was given in the following manner as summarized in the end of the preceding chapter:

Capitalist farms—farms which employ more hired workers than family workers.

Big peasant farms—farms which cannot exist without constant employment of hired worker and which have practically more than one regular hired worker as well as some temporary hired workers.

Middle peasant farms—farms of which one out of every two or three employs hired workers.

Small peasant & proletarian farms—farms which employ practically no hired worker.<sup>30)</sup>

The classification criteria as summarized above will be used in this chapter too, although we intend to adopt two classification methods—i.e., the one method classifying on the basis of average number of hired laborers employed per farm, along with the Lenin's preceding method of classification of German farms, and another estimating average number of employed laborers by average expenditures per farm for hired labor, contract labor and machine hire.

We have to use such complicated methods because the "1969 Census of Agriculture", our basic material of analysis, does not show full numbers of hired laborers employed by farm (particularly for those migratory workers). The census includes only those laborers who receive wages from the farm operators directly, and for this reason, U.S. farms also employ considerable hired labor in the shape of contract labor (frequent type of using migratory workers) and machine hire which the census omits altogether.

Moreover, as was pointed out earlier,<sup>31)</sup> the recent progress of mechanization of agriculture—particularly that of specialized farm machinery or facilities for specific farm work or operations—tends to enlarge seasonal fluctuations in number of hired laborers employed, and at present, the amount of expenditures for hired labor seems to reflect the year-round scale of use of hired laborers more accurately than the mere number of laborers employed.

On the other hand, in order to pursue our study in the proposed manner, there are two problems concerning classification criteria which we must resolve beforehand. The one concerns estimates of the average number of family workers per farm and the average number of working days per year by a family worker in today's U.S. agriculture, as these figures are necessary to ascertain the lower limit of capitalist farms in which hired work surpasses in importance that of the family work. Another problem is estimating average

30) To be sure. Lenin clearly distinguishes small peasant farms and proletarian farms. However, because the present study is directed to analysis of large-scale farms, we are not going to direct our attention to the proletarian farms per se. In the present thesis, small peasant farms and those which are inferior to that category (i.e., proletarian farms) will be treated as a single group because they are alike in that their dependence on hired labor is negligibly small. The author intends to conduct a positive study of today's small peasant and proletarian farms on some other opportunity.

31) Isshin Nakano, "The Position and the Character of the Large-Scale Farming in the United States (I)", *The Kyoto University Economic Review*, Vol. 48, No. 1-2, Apr.-Oct. 1978, pp. 28-33.

number of working days and wage per year per regular worker which is needed in estimating in turn the scale of hired labor usage which requires conversion of wage expenditures into average number of regular workers employed.

As we have pointed out in the preceding chapter, these two points also show the difference in approach between Ouchi and the author in their classification of U.S. farms, and it would now be appropriate that they are reviewed here in some detail.

#### (1) Average Number of Family Workers and Days of Work

To begin with, we shall see the average number of family workers per farm and their average working days. In his analysis of U.S. farms of 1969, Ouchi estimates the average number of family workers for total farms to be 1.46 for 1959, 1.43 for 1964 and 1.32 for 1969<sup>32)</sup> in order to arrive at his estimation of the scale of hired work employed by a farm in which there exists an equal importance between the family work and hired work. However, in the author's opinion, such a method is not sufficient for the purpose. As Lenin stressed in his study of German farms of 1907, average number of family workers differs in a large way depending on the scale of farms.

Following the method of Lenin, we shall first estimate average number of family workers in U.S. agriculture for each of the classification category. Since the 1969 Census does not give data on farmwork provided by farm operators and their families for their own farms, we must use the figures shown in "Farm Labor",<sup>33)</sup> a special report attached to the 1964 Census.

The report has two defects: firstly, it does not contain data on family workers for Class Ia farms (those with value of farm products sold of \$100,000 or more), and secondly, it treats all farms whose sales vary between \$20,000 and \$100,000 as one group and for this reason, we cannot know scale of family work separately for Class Ib farms (scale of \$40,000~\$100,000) and Class II farms (\$20,000~\$40,000), but nevertheless, we can have at least some insight from the material into the family work situation for each group of farms.

With reference to Table 2, which was developed from the report, we can examine average number of family workers per farm for each group by dividing average number of family workers per year by number of farms. With the exclusion of Class Ia or the top class farms, average number of family workers for the total farms is 1.44 but we notice that as scale of farm products goes up, the number of family workers also increase. In

32) Tsutomu Ouchi, *Modern Agriculture in U.S.A.*, 1975, p. 129. In Chapter II, the author demonstrated the fact that the average number of family workers per farm, which stood at 1.6 in the beginning of this century, decreased consistently since then except for these ten years between the Great Depression and the end of the Second World War, and that the trend was accelerated in 1960's. Our estimate of family workers per farm, after giving effect to variances in the number of farms resulting from a change of definition of "farm", shows that the number is 1.31 in 1960, 1.23 for 1965 and 1.13 for 1970, which are substantially below Ouchi's estimation, and it shows the fact that the U. S. tradition to estimate the average number of family workers per farm to be 1.5 has already been quite far from the reality. (Isshin Nakano, *ibid.*, p. 29)

33) U. S. D. C., *Farm Labor, 1964 U. S. Census of Agriculture*, Vol. III, Part 2, 1968.



Table 2. Number of Family Workers and their Work Hours by Economic Class of Farms in U. S. A.

Indices Economic class	Number of farms (A)	Average no. of family workers per year (B)	Total yearly working hours of family workers (C)	Average no. of family workers per farm (D=B/A)	Average per family worker		Total yearly working days of family workers per farm <sup>1</sup> (G=D×F)	Conversion into hired workers <sup>3)</sup>	
					Yearly working hours (E=C/B)	Yearly working days <sup>2)</sup> (F=E/8)		Regular (G/202)	Year-round (G/319)
Total <sup>1)</sup>	Thousands 3, 075	Thousands 4, 423	Millions 7, 316	Persons 1. 44	Hours 1, 656	Days 207	Days 297	Persons 1. 47	Persons 0. 93
\$ 20,000~100,000 (Class Ib, II)	355	627	1, 400	1. 77	2, 233	279	493	2. 44	1. 55
\$ 10,000~ 20,000 (Class III)	480	840	1, 749	1. 75	2, 083	260	456	2. 26	1. 43
\$ 5,000~ 10,000 (Class IV)	518	893	1, 713	1. 72	1, 918	240	413	2. 05	1. 30
\$ 2,500~ 5,000 (Class V)	436	643	1, 001	1. 47	1, 556	195	287	1. 42	0. 90
\$ 500~ 2,500 (Class VI)	322	403	549	1. 25	1, 362	170	213	1. 06	0. 67
Part-time farms	636	749	604	1. 18	807	101	119	0. 59	0. 37
Part-retirement farms	329	267	299	0. 81	1, 121	140	114	0. 56	0. 36

Note: 1) Largest farms (sales of \$ 100,000 or more) and abnormal farms are excluded.

2) Assuming eight hours of work per day.

3) Average working days per year are assumed 202 for regular and 319 for year-round hired workers.

Source: U. S. D. C., Farm Labor, 1964 U. S. Census of Agriculture, Vol. 3, Part 2, 1968. p. 63, p. 68.

contrast to 0.81 for part-retirement farm and 1.18 for part-time farm, the average number of family workers in a farm with scale of \$ 20,000~\$ 100,000 is 1.77 or twice as much of the the part-retirement farm. Because of the limitation in this material, it is not possible to calculate average number for Class Ia and Class Ib farms, but based on the fact that the number of family workers is approximately 1.7 for all farms with sales ranging from \$ 5,000 to \$ 100,000, we may safely assume that the average number for those largest classes of farms (Class Ia and Ib) would not exceed two at the most.<sup>34)</sup>

The same table can also provide data concerning the average yearly working days per family worker. By dividing total yearly working hours for family workers for total farms by average number of family workers per year, we obtain the average yearly working hours for each worker, and on the assumption that he works eight hours per day, we can obtain yearly working days. The average for total farms is 207 days, which is considerably shorter than the figure of 250 according to Ouchi's estimate.<sup>35)</sup> Moreover, the average number of working days, when compared between each group of farms, show differences between each group much large than the figure for the number of family workers. In the case of part-time farms, the number of yearly working days is extremely small (approx. 100 days), but for other farms with sales of \$ 5,000 or less, the figure is roughly 200 days or less, and it is lower than the average working days for all farms in U.S.A.. The number of days worked by a family worker on the average, is larger as the farm's scale increases. It is 240 days for Class IV farms and 260 days for Class III farms. The number reaches 279 or three times of part-time farms for the farms with sales of \$ 20,000 to \$ 100,000.

Thus, the average number of yearly working days per family worker increases in proportion to the farm scale along with the average number of family workers, and this would mean that Ouchi's method of using the average for total farms is not sufficient for the purpose of estimating the level at which the family work and hired work share an equal importance in large-scale farms. Because the statistics for Class Ia and Class Ib (largest scale) farms do not contain data on the family work situation, it is impossible to make an accurate estimate, but the average yearly working days per family worker would in no event exceed 300 days in these groups of farms, and assuming that the average num-

34) The average number of family workers per farm in Germany of 1907 was 1.8, but it was 0.9~1.6 for those proletarian farms below 2 ha level, 2.5 for small peasant farms between 2 to 5 ha, 3.1 for middle peasant farms between 5 to 10 ha, and 3.4 for large peasant farms between 10~20 ha, respectively. The number starts to decrease in the case of capitalist farms exceeding 20 ha, and the average number drops to 3.3 for farms between 20~50 ha, 2.6 for those between 50~100 ha, and to 1.6 for those exceeding 100 ha, or consistently in reverse to the scale of farms (See, Table 1). Because of the limitations in the materials used, it is not possible to determine the scale of farm at which the trend of increase in average number of family workers—proportional to a certain extent to the increase in size of farms—reverses itself.

35) Tsutomu Ouchi, *ibid.*, p. 129. As pointed out in Chapter II, it is a general trend that there is a large difference in yearly working hours between farm operators and members in their household. The overall average is 264 days (total yearly working hours: 5,049 million hours, average persons working on farms per year: 2,389 thousands) for the farm operators, but 139 days per member of household of farm operator (2,266 million hours and 2,034 thousands). The weighted average is 207 days (7,316 million hours for 4,423 thousands). (U. S. D. C., *op. cit.*, p. 11, p. 67)

ber of family workers per farm is two as mentioned earlier, the total number of working days per farm (Class Ia or Ib) for a year will be 600 days at most. The figure (600), as we shall see, is an important criteria to determine the lowest level of a capitalist farm in U.S. of today.<sup>36)</sup>

(2) Average Number of Working Days and Average Wage of Regular and Year-Round Hired Workers.

We shall now move to the second question of the average yearly working days and average wage of regular hired workers. In his earlier study of the classification of U.S. farms on the basis of the 1964 Census, the author converted the average expenditure for hired labor per farm into the number of regular hired workers employed in order to estimate the scale of hired labor used by each group of farms, and on that occasion, he used two methods of processing statistical data concerned.<sup>37)</sup>

One of the method is the approach used by R. Nikolitch<sup>38)</sup> which assumes that average yearly working days of regular hired workers stretch over twelve months. Therefore, if we take the average monthly wage per hired worker during that year and multiply it by 12, we obtain the average annual wage per regular hired worker. By dividing average wage expenditure per farm for each group of farms by the annual wage per worker thus obtained, we can estimate average number of regular hired workers employed (Ouchi also used the Nikolitch's method in his analysis of the 1969 Census). Another method is the one developed by the author. In considering the seasonal fluctuation of farm work, we assume that 5 months (150 days) represent the average days of work for a regular hired workers—the figure (150 days) is also taken as the definition of regular hired worker in the U.S. Census—and following the approach of Nikolitch in other respects, we can estimate the number of regular hired workers.

In order to estimate the scale of use of hired labor which reflects as far as possible the reality of regular hired workers in U.S. farms, the author has used, in the present thesis, the statistical report of U.S. Department of Agriculture concerning hired farm workers employed in 1969,<sup>39)</sup> and determined the average yearly working days and average wage for regular hired workers to be used for conversion of their number from farm wage expenditures.

This statistical report classifies hired farm workers in U.S.A. in the following four

36) The figure (600 days) of total yearly working days by family worker per farm is an estimate for 1965, and the number for 1969 is naturally expected to be somewhat different. However, since the average number of family workers per farm has been decreasing quite rapidly in the recent years, 600 days of family work per farm would not be an underestimate for Class Ia and Class Ib farms, if it could be an overestimate. As it is, when we use the figure (600 days) to set the lowest limit of capitalist farm in 1969, it could underestimate the number of capitalist farms, but it would not lead to an overestimation.

37) Isshin Nakano, "The Agricultural Policies and the Capitalist Development of Agriculture in the United States", pp. 75–79.

38) R. Nikolitch, "Our 31,000 Largest Farms", *Agricultural Economic Report*, No. 175, Mar. 1970, pp. 19–23.

39) U. S. D. A., "The Hired Farm Working Force of 1969: a Statistical Report", *Agricultural Economic Report*, No. 180, Apr. 1970.

groups according to number of days they worked in farms for one year: (a) "casual workers" who work less than 25 days in farms, (b) "seasonal workers" who work between 25~149 days, (c) "regular workers" who work between 150~249 days, and (d) "year-round workers" who work more than 250 days. Of these four groups, (c) and (d) can be considered as regular hired workers. According to the statistical report, the average days of work for the regular workers were 202 days in 1969 and their average wage for that year was \$2,378. The figures for year-round workers were 319 days and \$3,485.<sup>40)</sup> We shall use these average figures for (c) and (d) group hired workers in the analysis of importance of hired labor for each group of farms in U.S.A..

The last problem we need to discuss in this section is the scale of employment of those regular or year-round workers—as estimated from wage expenditures—at which farms could be classified into capitalist, big peasant middle peasant and small peasant farms, respectively. Of these, the capitalist farm is most difficult to assess. As we have already seen, the lowest limit of capitalist farms is the one in which hired work and family work have equal importance (50% dependence on wage labor), but in order to confirm the level, we must clarify the amount of family work in each group of farms.

As shown in Table 2, it was possible, for the year 1964, to obtain total yearly working days of family workers per farm for each group of the farms by multiplying the average number of family workers for each group by the average yearly working days per family worker. For all farms, the total yearly working days of family workers per farm were 297 days, but they go up to 456 days for \$10,000~\$20,000 class farms and 493 days for \$20,000~\$100,000 class farms. The figures in the right end column of Table 2 are obtained by dividing the total working days of family workers per farm by the averages for regular and year-round workers (202 days and 319 days, respectively). These figures express the number of regular or year-round workers employed by those farms whose dependence on hired labor reaches 50% (i.e., the lowest limit of capitalist farm). That is to say, for the group of farms with sales of \$20,000~\$100,000, there are 1.77 family workers on the average who work 493 days per year at their farm, and the scale of hired labor that equals the amount of family work corresponds to 2.44 men for regular workers or 1.55 men for year-round workers (by the same token, 2.26 for regular workers or 1.43 for year-round workers for the farm of \$10,000~\$20,000, at which weight of hired work equals that of family work).

The amount of family work in the largest (Class Ia and Ib) farms cannot be assessed exactly. However, as we mentioned earlier, even on the largest estimates—two as the average number of family worker and 300 days as the amount of their working days per man/year, the total amount is 600 days on the average for the Class Ia and Ib farms, and if we divide 600 days by the average of days worked by the regular or year-round workers mentioned earlier, the results will be almost three regular workers or less than two year-round workers, respectively.

As we will see in detail in the following chapter, those farms who employ much hired

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40) *Ibid.*, p. 15.

labor are those whose value of sales exceed \$20,000, and in particular, those Class Ia and Ib farms with sales of \$40,000 or more. Therefore, in our study, we shall consider as the lowest level of capitalist farms those who employ—based on their wage expenditures—three regular workers or two year-round workers, and all the farms employing more than these numbers of regular or year-round workers will be treated alike as capitalist operations.

Incidentally, according to Lenin's analysis of German farms mentioned earlier, the big peasant farms "which cannot do without the constant employment of wage labor" were those which had one regular hired worker and some temporary workers. In our case, because of the approach to estimate the scale of wage labor by converting wage expenditures (including those for temporary workers) into the number of regular or year-round workers, we shall consider as big peasant farms those which employ more than one year-round worker or 1.5 regular workers. Likewise, we shall consider as middle peasant farms those of which one out of every two or three farms employs hired workers on the average, and in recalling the fact that in Germany in 1907, a farm, on the average, had 0.3 regular worker and 0.4 temporary worker, we shall treat as middle peasant farms those which employ more than 0.5 regular worker or 0.3 year-round worker on account of their wage expenditures converted in number of such employees. All farms below such levels are classified as small peasant or proletarian farms.

## VII Class Structures in Modern U.S. Agriculture —1969—

Thus having completed the preliminary study concerning classification methodology and class definitions necessary for the classification on the basis of hired labor usage, we are now going to start the relevant analysis in the following part.

In this chapter, we shall use three methods for classification. First of all, according to the conventional classification approach, we shall use the number of hired workers (regular and seasonal hired workers) contained in the 1969 Census. The next approach makes use of wage expenditures as a means to estimate amount of hired labor used for each group of U.S. farms, and lastly, we shall consider expenditures for contract labor and machine hire which relate to the use of hired labor, and including these expenditures into wage expenditures we shall see how they will depict the real hired labor situation.

### (1) Regular Hired Workers and Seasonal Workers—Classification (I)

According to the 1969 Census, there were 654 thousand regular workers (those who work more than 150 days at a farm) and 8,126 thousand seasonal workers (those who work less than 150 days) in U.S. farms of 1969.<sup>41)</sup>

Table 3 shows their numbers for each group of U.S. farms. If we look at the average number of regular as well as seasonal workers per each group of farms, our attention is

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41) The 1969 Census records the number of regular and seasonal hired workers for Class I to Class V farms (those farms with sales of \$2,500 or more) only.

Table 3. Number of Hired Workers by Economic Class of Farms

Economic class	No. of hired workers		Total		Average per farm	
	Regular	Seasonal	Regular	Seasonal	Regular	Seasonal
	Thousands	Thousands	Persons	Persons		
\$ 1,000,000 or more	96	208	60.6	131.1		
\$ 500,000~\$ 1,000,000	47	112	18.9	45.0		
\$ 300,000~\$ 500,000	44	121	9.5	25.8		
\$ 200,000~\$ 300,000	43	130	5.4	16.4		
\$ 100,000~\$ 200,000	91	318	2.6	9.0		
Subtotal (Class Ia)	322	889	6.2	17.1		
\$ 40,000~\$ 100,000 (Class Ib)	151	798	0.9	4.7		
\$ 20,000~\$ 40,000 (Class II)	102	1,046	0.3	3.2		
\$ 10,000~\$ 20,000 (Class III)	47	995	0.1	2.5		
\$ 5,000~\$ 10,000 (Class IV)	19	785	0.05	2.0		
\$ 2,500~\$ 5,000 (Class V)	14	612	0.03	1.5		
Total farms (Class I-V)	654	5,126	0.4	3.0		

Source: 1969 Census, Vol. 2, Chap. 7, p. 70, p. 86.

first attracted by the so-called "million dollar farms" which employ more than 60 regular workers and 130 seasonal workers. Then comes three groups who have 5~19 regular workers and 16~45 seasonal workers—or (a) farms with sales ranging from \$500,000 to \$1,000,000, (b) those ranging from \$300,000~\$500,000 and (c) those ranging from \$200,000~\$300,000, and in considering the magnitude, we have little difficulty to classify them as capitalist farms. Also, the group of \$100,000~\$200,000, on the average, employs 2.6 regular workers and 9 seasonal workers and as we will discuss in detail later, according to Lenin's definition, we may safely treat them as capitalist farms as well. On the other hand, those farms making less than \$20,000 (Class III and below), there are only few regular or seasonal workers, and there is little doubt that farms belonging to these groups could be identified as small peasant or proletarian farms.

The most controversial are the farms who belong to the groups making \$20,000~\$100,000, those farms realizing sales of \$40,000~\$100,000 (Class Ib) on the average employ 0.9 regular worker per farm, and those of Class II (\$20,000~\$40,000) 0.3 respectively, but in order to classify their group, we must take into consideration the average scale of employment of seasonal laborers (aggregate total days) for each group, because 3~5 seasonal laborers are known to be employed per farm. However, so long as we know only the number of regular and seasonal workers employed, it is impossible to determine the scale, and for this reason, we have to postpone classification of those \$20,000~\$100,000 class farms until more is known concerning their wage expenditures which will be discussed later.

Next, we will compare the number of regular and seasonal workers employed per farm for each type of farm (Table 4). With regard to the largest class (Class Ia), all types of farm excluding livestock farms employ more than 3.5 regular workers and they

Table 4. Average Number of Regular/Seasonal Workers Employed per Farm

(Unit: person)

Economic class Type of farms	Class Ia	Class Ib	Class II	Class III	Class IV	Class V	Total (I-V)
Cash-grain	4.0 7.6	0.8 2.8	0.2 2.1	0.1 1.6	0.0 1.1	0.0 0.9	0.2 1.6
Tobacco	27.3 107.5	1.7 15.2	0.6 11.9	0.2 9.4	0.0 6.1	0.0 3.7	0.2 6.8
Cotton	10.7 19.2	2.7 6.3	1.1 4.3	0.4 3.9	0.1 3.2	0.0 2.3	0.8 3.9
Other field-crop	13.4 30.8	1.4 9.9	0.5 7.0	0.2 4.8	0.0 2.9	0.0 2.0	1.3 7.1
Vegetable	19.0 94.6	2.5 28.3	1.1 14.2	0.3 7.5	0.1 4.4	0.0 2.8	2.6 18.9
Fruit and nut	14.7 87.8	2.2 33.2	0.8 20.7	0.3 12.8	0.1 7.9	0.1 5.1	1.2 17.0
Poultry	3.6 6.0	0.4 3.0	0.1 1.6	0.1 1.2	0.0 1.0	0.0 0.7	0.7 2.6
Dairy	4.9 4.1	1.0 2.5	0.3 2.2	0.1 1.6	0.0 1.2	0.0 0.9	0.3 1.8
Livestock <sup>1)</sup>	2.0 3.9	0.4 2.4	0.2 2.0	0.1 1.7	0.0 1.4	0.0 1.1	0.2 1.7
Livestock ranches	4.9 5.5	1.3 2.6	0.5 2.0	0.2 1.5	0.1 1.2	0.0 0.9	0.5 1.6
General	7.6 25.2	1.3 6.5	0.4 4.0	0.1 2.9	0.1 2.2	0.0 1.5	0.4 3.2
Miscellaneous	21.2 31.0	3.1 7.7	1.2 4.6	0.4 3.3	0.1 2.1	0.2 1.9	1.9 4.8

Note: 1) Livestock farms are other than poultry and dairy farms and livestock ranches. The column of livestock farms in following tables is same as the one in this table.

2) For each column, the upper line figures show regular hired workers and the lower line shows seasonal hired workers.

3) Figures less than 0.05 are shown as 0.0.

Source: 1969 *Census*, Vol. II, Chap. 8, pp. 70-246, pp. 268-269.

can be considered as capitalist farms. There exists, naturally, large differences between various types of farms. For instance, an average tobacco farm employs 27 regular workers and 107 seasonal laborers. While vegetable, fruit and nut, "general", "miscellaneous", cotton farms etc. normally use a large number of regular workers and seasonal laborers, those farms engaged in corn, wheat and other "cash grain" crops, poultry and dairy farms, and livestock ranches use relatively much less hired labor even though they belong to Class Ia. However, for all of them, hired work is predominant over family work.

Class Ib and Class II farms, however, employ much less regular workers, and the way they use seasonal laborers is rather complicated. Unless we take into consideration

the aggregate amount of seasonal hired labor (working days), it is difficult to determine class characteristic of most of the farms. With those cash-grain farms, tobacco and cotton farms of Class Ib and fruit or dairy farms of Class II, for instance, their dependence on hired labor as expressed by aggregate number of working days of seasonal laborers is extremely shifting, and what is most important is the study of wage expenditures which takes into account such circumstances (particularly important is the analysis of wage expenditure reflecting aggregate number of days worked by seasonal laborers because, average number of days of their employment tended to be longer in proportion to the scale of sales of their employers).<sup>42)</sup>

## (2) Analysis of Wage Expenditures—Classification (II)

We shall now try to analyze wage expenditures of farms in order to understand more accurately the actual scale of hired labor utilized in today's farms in U.S.A.. During 1969, the U.S. farms spent 3.4 billion dollars as wages. Table 5 shows the wage expenditures converted into the number of regular workers (who work 202 days per year on the average) and that of year-round workers (who work 319 days) employed by each group of farms. This means that the wages spent by each group are divided by the average annual wages per regular worker (\$2,378) or year-round worker (\$3,485) in 1969. Total number of regular workers employed, obtained from farm wage expenditures, was 1,419 thousands (969 thousands as year-round workers), which is more than twice of the number of regular hired workers (654 thousands) in Table 3. Next we shall examine the situation for each group of farms.

If we compare the number of regular or year-round workers employed per farm in the light of the basic criteria of classification discussed in the preceding chapter, we notice that of those farms in question (i.e., farms with sales of \$20,000~\$100,000 in revenue), Class II farms employ 0.6 regular worker (or 0.4 year-round worker) per farm, which exceeds the lowest level of the middle peasant farms (0.5 regular or 0.3 year-round worker per farm), and this clearly distinguishes them in contrast to those Class III farms and below which employ little hired labor. As for the Class Ib farms, they employ 1.7 regular worker or 1.2 year-round worker per farm and for this reason, their operating scale is equal to that of big peasant farms which must use hired labor constantly. With regard to the subgroup of farms with sales of \$100,000~\$200,000, they employ 5.5 regular workers (3.8 year-round workers) according to their wage expenditures. This largely exceeds the lowest level of capitalist farms (3 regular or 2 year-round workers) and characterizes all farms in Class Ia with sales in excess of \$100,000 as capitalist farms.

42) The ratio of seasonal laborers in workforce of all groups of farms (Class I to V) is 17% for Class Ia and 33% for Class I as a whole, but the concentration of regular hired workers and wage expenditures to be analyzed in the following section (wages include those for regular as well as seasonal workers) is 50% for Class Ia and 70% for all Class I farms, which can only be interpreted to mean that as a farm is larger in scale of sales of products such as a Class Ia or Ib farm, an average seasonal worker tends to be employed for a longer period of time. In small scale farms, the number of seasonal workers per farm is not only smaller but they work much less number of days a year.



Table 5. Number of Regular and Year-Round Workers Estimated from Wage Expenditures

Economic class	Wage expenditures		Estimated of regular/year-round workers <sup>1)</sup>			
	Total	Per farm	Total		Per farm	
			Regular	Year-round	Regular	Year-round
	Mil. dol.	Dol.	Thousands	Thousands	Persons	Persons
\$ 1,000,000 or more	478	301, 314	201	137	126. 7	86. 5
\$ 500,000~1,000,000	235	94, 252	99	67	39. 6	27. 0
\$ 300,000~ 500,000	229	48, 860	96	66	20. 5	14. 0
\$ 200,000~ 300,000	224	28, 301	94	64	11. 9	8. 1
\$ 100,000~ 200,000	464	13, 139	195	133	5. 5	3. 8
Subtotal (Class Ia)	1, 630	31, 346	685	468	13. 2	9. 0
\$ 40,000~ 100,000 (Class Ib)	698	4, 111	293	200	1. 7	1. 2
\$ 20,000~ 40,000 (Class II)	468	1, 414	197	134	0. 6	0. 4
\$ 10,000~ 20,000 (Class III)	248	627	104	71	0. 3	0. 2
\$ 5,000~ 10,000 (Class IV)	126	322	53	36	0. 1	0. 1
\$ 2,500~ 5,000 (Class V)	94	238	40	27	0. 1	0. 1
\$ 2,500 or less (others) <sup>2)</sup>	76	76	32	22	0. 03	0. 02
Total Farms	3, 375	1, 236	1, 419	969	0. 5	0. 4

Note: 1) Wage expenditures divided by \$ 2,378 and \$ 3,485 (average annual wages for a regular worker and a year-round worker, respectively).

2) Excluding "abnormal" farms.

Source: 1969 Census, Vol. II, Chap. 7, p. 60, p. 70, p. 86.

Thus, from the analysis of Table 3 and 5, we can make the following conclusions concerning the classification of 2,730 thousand farms in existence in U.S.A. in 1969. There are, first of all, approx. 52 thousand (2%) farms in Class Ia which can be considered as capitalist farms<sup>43)</sup>, topped by 1,586 "million dollar farms", each of which uses hired labor equivalent to more than 120 regular workers or 80 year-round workers (estimated from wage expenditures). There are 170 thousand (6%) Class Ib farms which are identified as big peasant farms, and 331 thousand (12%) Class II farms which are middle peasant farms. The small peasant and proletarian farms belong to Class III and below (2,177 thousands or 80%). In addition, as we have confirmed in the earlier chapter, those Class Ia and Ib farms alone produce more than 50% of total U.S. farm products sold. The ratio exceeds 75% if Class II farms are added to Class I. As it is, those 8% capitalist and big peasant farms and 12% middle peasant farms, and particularly the

43) Wage expenditures of a farm situated at the lower end of capitalist farms which utilize 3 regular workers or 2 year-round workers per farm is approx. \$ 7,000 (a regular worker earns \$ 2,378 and a year-round worker \$ 3,485, respectively). With reference to the 1969 Census, a comparison of numbers of farms by wage expenditures shows there are 54 thousand farms who spent more than \$ 10,000 for wages and 62 thousand farms who spent \$ 5,000~\$ 10,000. This suggests that in reality, the number of capitalist farms exceeds 52 thousands which was the result of our estimate on the analysis by economic class of farms. (1969 Census, Vol. II, Chap. 4, p. 111)

former, constitute the predominant portion of the U.S. present agriculture, and while the small peasant and proletarian farms represent more than 80% of the total, their role in agricultural production of the country is by now a marginal one.<sup>44)</sup>

In our analysis, we have so far identified Class Ia farms as capitalist farms, Class Ib as big peasant farms, Class II as middle peasant farms and Class III and lesser farms as small peasant or proletarian farms, respectively. However, if we study the situation with regard to the type of farms, it looks as if the classification we established requires considerable modifications.

Table 6 shows the scale of employment of regular and year-round workers for each type of farms, using the computation method identical to the one used to develop Table 5. To begin with, the vertical column shows a very interesting feature. All of the Class Ia farms, regardless of their type, are capitalist farms employing more than three regular workers or two year-round workers. Class Ib farms, which we already defined as big peasant farms, however, include many which are either capitalist or middle peasant farms. Those which do not yet benefit fully from mechanization such as vegetable farms, "miscellaneous," fruit/nut, cotton and other farms require more hired labor, and even those who belong to Class Ib use large amount of hired labor equivalent to several regular workers. On the other hand, livestock and poultry farms do not use much hired labor and they are, for this reason, more similar to middle peasant farms. Similarly, Class II includes all of big, middle and small peasant farms, while in Class III, both middle and small peasant farms are existing practically side by side. Thus, the fact that the scales selling farm products are on the comparable level does not mean that the farms in question have same level of dependence on hired labor; actually, it varies considerably according to their types.

Next, we shall look at Table 6 horizontally. In this table, each type of farms is listed in the order of concentration of sales of farm products which results from the magnitude of scale, and shows in the gothic figures the average number of regular as well as year-round workers employed by the specific class of farms which produce more than 70% of the products sold i.e., the principal producer for each type of farm, starting from the top (Class Ia) farms.

Vegetable farm is the type in which concentration takes place in the most conspicuous manner. In this category, there are 2,100 Class Ia farms including 142 "million dollar farms" and 226 farms producing \$500,000~\$1,000,000 accounting for more than 70% of the total production of vegetables in the United States.<sup>45)</sup> The Class Ia farms use large amount of hired labor equal to 40 regular workers (or to 27 year-round workers),

44) As was pointed out in the earlier chapter, Ouchi classified as "small peasant or lesser groups of farms" those 95% of the total in 1969, and as rich peasant or capitalist farms only those 5% of the total. Because he underestimated the capitalistic character of U. S. agriculture in his classification of American farms, he was then forced to overestimate unreasonably the role of small peasant farms in agricultural output of USA today, as the author will demonstrate in due course. (Tsutomu Ouchi, *op. cit.*, p. 137)

45) 1969 Census, Vol. II, Chap. 7, p. 82, Chap. 8, p. 130, p. 260.

Table 6. Average Number of Regular and Year-Round Workers Employed per Farm  
Estimated from Wage Expenditures, by Type of Farms

Economic class		Class Ia	Class Ib	Class II	Class III	Class IV	Class V	Total (I-V)
Type of farm								
Average wage expenditure per farm	Vegetable	Dol. 94,517	13,081	5,170	1,938	750	402	13,319
	Poultry	16,174	1,463	519	305	194	159	3,072
	Miscellaneous	102,011	13,736	4,871	1,747	632	772	8,870
	Other field-crop	77,594	7,371	2,596	1,107	421	246	7,550
	Livestock ranches	21,948	5,202	1,902	747	336	224	2,060
	Fruit and nut	80,275	15,928	6,228	2,642	1,121	673	7,782
	Livestock	10,624	1,885	793	411	236	178	826
	Cotton	48,549	10,791	4,102	1,570	654	307	3,349
	Dairy	26,046	4,109	1,182	446	192	108	1,513
	General	41,562	5,716	1,717	699	337	243	1,807
	Cash-grain	20,152	3,636	1,089	429	204	143	913
	Tobacco	87,535	7,303	3,378	1,531	667	343	1,305
Average number of regular and year-round workers per farm (estimated)		Persons						
	Vegetable	C 39.7 27.1	5.5 3.8	2.2 1.5	0.8 0.6	0.3 0.2	0.2 0.1	5.6 3.8
	Poultry	C 6.8 4.6	M 0.6 0.4	0.2 0.1	0.1 0.1	0.1 0.1	0.1 0.0	1.3 0.9
	Miscellaneous	C 42.9 29.3	C 5.8 3.9	2.0 1.4	0.7 0.5	0.3 0.2	0.3 0.2	3.7 2.5
	Other field-crop	C 32.6 22.3	C 3.1 2.1	1.1 0.7	0.5 0.3	0.2 0.1	0.1 0.1	3.2 2.2
	Livestock ranches	C 9.2 6.3	B 2.2 1.5	0.8 0.5	0.3 0.2	0.1 0.1	0.1 0.1	0.9 0.6
	Fruit and nut	C 33.8 23.0	C 6.7 4.6	B 2.6 1.8	1.1 0.8	0.5 0.3	0.3 0.2	3.3 2.2
	Livestock	C 4.5 3.0	M 0.8 0.5	S 0.3 0.2	0.2 0.1	0.1 0.1	0.1 0.1	0.3 0.2
	Cotton	C 20.4 13.9	C 4.5 3.1	B 1.7 1.2	0.7 0.5	0.3 0.2	0.1 0.1	1.4 1.0
	Dairy	C 11.0 7.5	B 1.7 1.2	M 0.5 0.3	0.2 0.1	0.1 0.1	0.0 0.0	0.6 0.4
	General	C 17.5 11.9	B 2.4 1.6	M 0.7 0.5	S 0.3 0.2	0.1 0.1	0.1 0.1	0.8 0.5
	Cash-grain	C 8.5 5.8	B 1.5 1.0	M 0.5 0.3	S 0.2 0.1	0.1 0.1	0.1 0.0	0.4 0.3
	Tobacco	C 36.8 25.1	C 3.1 2.1	B 1.4 1.0	M 0.6 0.4	S 0.3 0.2	0.1 0.1	0.5 0.4

- Note: 1) Computation method for regular or year-round workers employed per farm is same as the one for Table 4.
- 2) The upper figure shows regular workers and the lower figure shows year-round workers for each type of farm.
- 3) Starting from Class Ia, number of the workers employed by those groups having more than 70 of sales are shown in gothic figures.
- 4) C: Capitalist farm, B: Big peasant, M: Middle peasant, S: Small peasant.
- 5) The number of employment smaller than 0.05 is shown as 0.0.
- Source: 1969 Census, Vol. II, Chap. 8, pp. 70-246, pp. 268-269.

and from this fact, we can say that the predominant part of U.S. vegetable production is undertaken by a small number of large, capitalist farms.

There are four other types of "miscellaneous", "other field-crop", poultry farms and livestock ranches which show the highest degree of concentration next to vegetable farms, and for these types, Class Ia and Class Ib farms produce more than a half of total production. "Miscellaneous" and "other field-crop" farms have a particularly high level of concentration and like vegetable farms, those capitalist farms dominate the production. Class Ia farms in these instances are large-scale capitalist operations employing, on the average, 33 to 43 regular workers, and they produce among themselves 50~60% of the total products of the nation, while the Class Ib capitalist farms which use 5~6 regular workers per farm produce approx. 20% of the total. As for poultry farms and extensive livestock ranches, Class Ia farms produce the majority of total among themselves and their operations are capitalistic, although the average number of regular workers are 7~9, which is relatively inferior to the numbers in vegetable and other two types of farms discussed earlier. Even with Class Ib farms (poultry and livestock ranches) who produce 15~30% of total, the dependence on hired labor is not very significant. That of poultry farms is equivalent to the level at middle peasant farms and the one for the livestock ranches to the one at big peasant farms, respectively.

In the third group comprising four types of fruit and nut, cotton, livestock and dairy farms, Class Ia, Ib and II farms produce more than 70% of the total. As for the fruit/nut and cotton farms, Class Ia farms—as was the case with "miscellaneous" and "other field-crop" farms in the second group—are large capitalist farms each employing 20~34 regular workers. Class Ib farms are also capitalist, with 4 to 7 regular workers on the average. Class II farms complement, as big peasants, those capitalist farms in fruit/nut and cotton production. With regard to livestock and dairy farms, Class Ia farms are capitalistic, employing, on the average, 4.5 and 11 regular workers respectively, although in the livestock farms, the scale of hired labor employment is relatively small compared with other types of Class Ia farms (but it should be noted that this category includes a considerable number of large-scale capitalist farms such as feedlots of professional ranchers who are rapidly growing recently in U.S.A.).<sup>46)</sup> For the dairy farms, Class Ib and Class II correspond to large and middle peasant farms and for the livestock farms, they correspond to middle and small peasants, respectively, judging from the extent of their dependence on hired labor; these peasant farms, along with the capitalist farms, produce the predominant part of the total output of dairy products and livestock.

With respect to the fourth group, "general" and cash-grain farms show relatively lower level of concentration of production, and the predominance in share of production extends from Class Ia to Class III farms. Of these, Class Ia farms are capitalistic, while

46) In 1969, 632 out of 1,586 "million dollar farms", and 700 out of 2,493 farms with sales of \$ 500,000~\$ 1,000,000, and 1,380 farms out of 4,682 farms with sales of \$ 300,000~\$ 500,000 were livestock farms, and their numbers in these groups are much larger than any other type of farms. Also, there are 573 livestock farms spending more than \$ 50,000 for wages, and 1,700 of livestock farms spend \$ 20,000~\$ 50,000 for wages. (1969 Census, Vol. II, Chap. 7, pp. 81-82, Chap. 8, p. 45)

Class Ib can be considered as big peasant, Class II as middle peasant, and Class III as small peasant farms respectively, roughly corresponding to the overall classification pattern for all farms in the United States (See, Table 3).

Lastly, tobacco farms show the lowest degree of concentration, and the characters of principal producers are quite diverse. Class Ia farms employ 37 regular workers on the average, while their use of hired labor is equal to that by Class Ia "miscellaneous" and vegetable farms. Following these big capitalist farms, Class Ib farms are also capitalistic, while Class II, Class III and Class IV farms are big, middle and small peasant farms producing nearly all of the tobacco output in U.S.A..

### (3) Analysis of Expenditures for Wages, Contract Labor and Machine Hire—Classification (III)

So far, we have tried to classify U.S. farms on the basis of their wage expenditures, but we must not overlook the fact that in America, farms spend large amount of money other than for wages in order to entrust a part of their farm work to outside labor.<sup>47)</sup> Typical examples are their expenditures for contract labor and machine hire, and unless we take them into account, it would be very difficult to assess the importance of hired labor in accurate manner in farming operations in today's U.S.A..

Contract labor is considered to be crew-type hand labor, such as fruit picking or vegetable harvesting etc., performed by a crew of laborers (many of them are migratory workers) under a contract with a labor contractor, crew leader, processor or dealer, and it is widely used in vegetable, fruit, other field farms.<sup>48)</sup> For this reason, although the

47) Outline of the agricultural service enterprises in U. S. A. was made clear, for the first time, in a special report attached to the 1969 Census and titled "Agricultural Services". This report covers a total of 32,565 agricultural service establishments in 1969, of which 80% were individual proprietorships, 11% were corporations, and 7% were partnerships. These establishments realized the gross receipts for agricultural service of 2,094 million dollars during the year. Of this total amount, 1,142 million dollars was the farm-related services while 950 million dollars was earned from the nonfarm-related services (garden service, hunting, veterinarian cares for pets and animal training, etc.). Among the various services to farms, main items are cattle feedlots, veterinarian services for livestock, poultry hatcheries, artificial insemination, picking and shipping of fruits or vegetables under farm labor contract, spraying of chemicals or fertilizer, cotton ginning, grain grinding, citrus grove cultivation and maintenance, etc., showing the importance of various contract labor and machine hire as we shall see in the following part. The all establishments hired 110 thousand wage laborers who work more than 150 days and 313 thousands of those who work less than that (in addition to 31 thousand family workers who work more than 150 days and 6 thousands of same who work less than 150 days, respectively), and paid the total wage of 593 million dollars. More than half (55%) of the total wages was paid by corporations, each of whom paid, on the average, 86 thousand dollars as wage which is by far well above the levels of wages spent by others. For those farms who use the agricultural services, it does not make any difference whether they are provided by hired laborers or family workers, and we can realize, from the figures quoted in the special report, that U.S. farms utilize a very large amount of hired labor—equivalent to 459 thousand workers (423 thousands of which are wage laborers and 36 thousands are family workers) in the form of agricultural services. (U.S.D.C., *Agricultural Services, 1969 Census of Agriculture*, Vol. III, 1972, pp. 2-13)

48) *1969 Census*, Chap. 4, p. 82, p. 84.

expenditures for contract labor is in reality a part of total wages paid by the farm. But the farm operators often do not consider such contract works as hired farm labor and many time do not know the number of workers in the crew. For they do not pay wages to the workers individually and pay the amount specified in the contract to the contractors. Furthermore, in earlier censuses, reporting method of expenditures for contract labor had not been very consistent. For 1954 and 1959, they were included in expenditures for hired labor, while in 1964 farmers were instructed to report them as expenditures for machine hire, and it was obtained as a separate item for the first time in 1969, but only for Class I-V farms.<sup>49)</sup>

Total contract labor expenditures by U.S. farms (from Class Ia to V) exceeded 462 million dollars in 1969, of which more than half (56%) were spent by Class Ia farms. If Class Ib farms were added, the share rises to 73%. Those farms with sales of \$1,000,000 or more spent \$50,000 on contract labor per farm, while the farms realizing \$500,000~\$1,000,000 in sales spent \$18,000 per farm, and the figure stood at \$4,976 for the total Class Ia farms. Table 7 shows comparison of the average expenditure for contract labor for each type of farms and the order of farms by type follows the amounts of expenditures per Class Ia farm. We can see from the table that there is a very large difference in the scale of contract labor used according to the type of farms. Vegetable and fruit/nut farms are outstanding, and those Class Ia farms spend on the average \$37,940 and \$34,143 for contract labor, respectively. If the average wage expenditures which we have already seen for each type (\$94,517 and \$80,275) were added to these figures, the results will be the enormous expenditures of \$132 thousands and \$114 thousands per farm in Class Ia group of vegetable and fruit farms, respectively. For those two types, even Class Ib farms spend more than \$4,000 on contract labor per farm, and the amount will go up to \$17,000~\$20,000 if we add the wage expenditures to it. Next come those "miscellaneous" and "general" as well as cotton farms of which Class Ia group spend on the average \$5,000~\$9,000 per farm. Except for these groups, other types of farms including crops and livestock growers do not spend so much in contract labor on the whole.

We will next refer to expenditures for machine hire. The machine hire means to entrust to custom farmwork such mechanized works as tractor hire, custom combining, plowing, spraying, corn-picking and silo filling etc.. Trustees own machines and on the request of farm operators (trustees), operate mechanized work himself or by hiring others in the farm of the trustees. Therefore the expenditures for machine hire which are provided for by farm operators are to include the wages of the machine operators as well as payment for rent of the machines.<sup>50)</sup>

In 1969, U.S. farms (including all of Class I-V farms) spent 875 million dollars for machine hire, and the expenditure was larger in proportion to the scale of farms. Class Ia farms, who are the foremost in ownership of farm machinery and equipment, spend \$3,400 per farm for machine hire, followed by Class Ib farms who spend nearly \$1,000 on the average. Those larger farms invest much in machinery and equipment, but

49) *Ibid.*, p. 84.

50) *Ibid.*, p. 82, p. 84.

Table 7. Expenditures for Contact Labor/Machine Hire per Farm.

(Unit: dollars)

Economic class		Class Ia	Class Ib	Class II	Class III	Class IV	Class V	Total (I-V)
Type of farm								
Contract labor expenditures	Total	4,976	473	164	86	51	38	267
	① Vegetable	37,940	4,091	1,532	460	188	80	5,018
	② Fruit and nut	34,143	4,725	2,229	1,206	657	392	3,113
	③ Other field-crop	9,188	1,660	584	286	97	45	1,123
	④ General	7,653	838	238	99	47	28	290
	⑤ Cotton	4,999	1,038	450	226	103	49	368
	⑥ Miscellaneous	1,911	485	241	148	66	125	276
	⑦ Cash-grain	1,206	221	76	39	21	15	64
	⑧ Livestock ranches	1,185	429	215	111	62	41	171
	⑨ Tobacco	1,114	445	143	63	21	12	47
	⑩ Poultry	970	123	52	28	20	14	203
	⑪ Livestock	670	117	58	37	24	20	60
	⑫ Dairy	664	123	42	19	10	7	48
Machine hire expenditures	Total	3,425	971	584	405	270	185	505
	① General	13,077	1,834	890	546	328	212	794
	② Cotton	12,448	2,868	1,457	946	616	321	1,206
	③ Vegetable	8,270	1,354	577	265	145	89	1,257
	④ Other field-crop	7,488	1,906	979	630	385	228	1,282
	⑤ Cash-grain	5,305	1,388	782	561	405	277	623
	⑥ Fruit and nut	4,574	1,423	781	495	323	241	745
	⑦ Livestock ranches	2,511	795	481	289	195	143	399
	⑧ Tobacco	2,207	827	489	265	137	87	191
	⑨ Livestock	2,165	844	554	366	228	155	412
	⑩ Dairy	1,535	631	385	244	158	115	332
	⑪ Miscellaneous	1,233	402	218	148	117	183	257
	⑫ Poultry	506	223	143	95	80	68	207

Note: 1) The order of farms by type follows the scale of expenditures per Class Ia farm.

Source: 1969 Census, Vol. II, Chap. 8, pp. 270-271.

at the same time, they do not hesitate to utilize machine hire service for those parts of mechanized work which can be done more economically by custom farmwork. Table 7 shows amount spent for machine hire per farm for each type of farms. In Class Ia, "general" and cotton farms rank the first with the average expenditure of more than \$10,000 per farm, followed by the vegetable, "miscellaneous," cash-grain and fruit/nut farms. These farms in Class Ia group spend \$4,500~\$8,000 per unit for machine hire, and those in Class Ib spend \$1,300 at the lowest level.

We have thus looked briefly at the importance of contract labor and machine hire in U.S. agriculture, and now, we shall go back to the classification of U.S. farms. In our analysis of Table 5 and 6, we used wage expenditures only, but today, these should include

Table 8. Average Number of Regular/Year-Round Workers Employed per Farm, Estimated from Wage and Contract Labor Expenditures<sup>1)</sup>

Economic class		Class Ia	Class Ib	Class II	Class III	Class IV	Class V	Total (I-V)
Type of farm								
Wage/contract labor expenditures per farm	Vegetable	Dol. 132,456	17,172	6,702	2,399	938	482	18,337
	Poultry	17,144	1,586	571	333	214	173	3,275
	Miscellaneous	103,922	14,221	5,112	1,895	699	897	9,146
	Other field-crop	86,782	9,032	3,181	1,393	517	291	8,673
	Livestock ranches	23,133	5,632	2,116	858	397	266	2,231
	Fruit and nut	114,418	20,653	8,458	3,848	1,778	1,065	10,895
	Livestock	11,294	2,002	852	448	261	198	886
	Cotton	53,548	11,829	4,552	1,796	757	356	3,718
	Dairy	26,710	4,233	1,224	465	201	115	1,561
	General	49,215	6,553	1,956	798	384	271	2,098
	Cash-grain	21,358	3,857	1,165	468	225	157	977
	Tobacco	88,650	7,748	3,521	1,594	688	355	1,352
Average number of regular/year-round workers per farm (estimated) <sup>2)</sup>		Persons						
	Vegetable	C 55.7 38.0	7.2 4.9	2.8 1.9	1.0 0.7	0.4 0.3	0.2 0.1	7.7 5.3
	Poultry	C 7.2 4.9	M 0.7 0.5	0.2 0.2	0.1 0.1	0.1 0.1	0.1 0.0	1.4 0.9
	Miscellaneous	C 43.7 29.8	C 6.0 4.1	2.1 1.5	0.8 0.5	0.3 0.2	0.4 0.3	3.8 2.6
	Other field-crop	C 36.5 24.9	C 3.8 2.6	1.3 0.9	0.6 0.4	0.2 0.1	0.1 0.1	3.6 2.5
	Livestock ranches	C 9.7 6.6	B 2.4 1.6	0.9 0.6	0.4 0.2	0.2 0.1	0.1 0.1	0.9 0.6
	Fruit and nut	C 48.1 32.8	C 8.7 5.9	C 3.6 2.4	1.6 1.1	0.7 0.5	0.4 0.3	4.6 3.1
	Livestock	C 4.7 3.2	M 0.8 0.6	S 0.4 0.2	0.2 0.1	0.1 0.1	0.1 0.1	0.4 0.3
	Cotton	C 22.5 15.4	C 5.0 3.4	B 1.9 1.3	0.8 0.5	0.3 0.2	0.1 0.1	1.6 1.1
	Dairy	C 11.2 7.7	B 1.8 1.2	M 0.5 0.4	0.2 0.1	0.1 0.1	0.0 0.0	0.7 0.4
	General	C 20.7 14.1	B 2.8 1.9	M 0.8 0.6	S 0.3 0.2	0.2 0.1	0.1 0.1	0.9 0.6
	Cash grain	C 9.0 6.1	B 1.6 1.1	M 0.5 0.3	S 0.2 0.1	0.1 0.1	0.1 0.0	0.4 0.3
	Tobacco	C 37.3 25.4	C 3.3 2.2	B 1.5 1.0	M 0.7 0.5	S 0.3 0.2	0.1 0.1	0.6 0.4

Note: 1) The figures show the total of wage expenditure per farm (upper section of Table 6) and the average expenditure for contract labor per farm (upper section of Table 7) by each type of farms.

2) This table is prepared on the same basis as Table 6.

Source: 1969 Census, Vol. II, Chap. 8, pp. 70-247, pp. 268-271.



Table 9. Average Number of Regular/Year-Round Workers Employed per Farm, Estimated from Wage/Contract Labor and Machine Hire Expenditures<sup>1)</sup>

Economic class		Class Ia	Class Ib	Class II	Class III	Class IV	Class V	Total (I-V)
Type of farm								
Wage/contract labor/machine hire expenditure per farm	Vegetable	Dol. 136,591	17,849	6,991	2,531	1,011	527	18,965
	Poultry	17,397	1,697	642	381	253	207	3,379
	Miscellaneous	104,538	14,422	5,221	1,969	757	989	9,275
	Other field-crop	90,526	9,985	3,670	1,708	710	405	9,314
	Livestock ranches	24,389	6,029	2,357	1,002	495	337	2,431
	Fruit and nut	116,704	21,365	8,848	4,095	1,940	1,185	11,268
	Livestock	12,376	2,424	1,129	631	375	275	1,092
	Cotton	59,772	13,263	5,281	2,268	1,065	516	4,321
	Dairy	27,477	4,548	1,417	587	281	173	1,727
	General	55,754	7,470	2,401	1,071	548	377	2,495
	Cash-grain	24,011	4,551	1,556	748	428	296	1,289
	Tobacco	89,753	8,162	3,765	1,727	756	399	1,448
Average number of regular/year-round workers per farm (estimated) <sup>2)</sup>		Persons						
	Vegetable	C 57.4 39.2	7.5 5.1	2.9 2.0	1.1 0.7	0.4 0.3	0.2 0.2	8.0 5.4
	Poultry	C 7.3 5.0	M 0.7 0.5	0.3 0.2	0.2 0.1	0.1 0.1	0.1 0.1	1.4 1.0
	Miscellaneous	C 44.0 30.0	C 6.1 4.1	2.2 1.5	0.8 0.6	0.3 0.2	0.4 0.3	3.9 2.7
	Other field-crop	C 38.1 26.0	C 4.2 2.9	1.5 1.1	0.7 0.5	0.3 0.2	0.2 0.1	3.9 2.7
	Livestock ranches	C 10.3 7.0	B 2.5 1.7	1.0 0.7	0.4 0.3	0.2 0.1	0.1 0.1	1.0 0.7
	Fruit and nut	C 49.1 33.5	C 9.0 6.1	C 3.7 2.5	1.7 1.2	0.8 0.6	0.5 0.3	4.7 3.2
	Livestock	C 5.2 3.6	M 1.0 0.7	M 0.5 0.3	0.3 0.2	0.2 0.1	0.1 0.1	0.5 0.3
	Cotton	C 25.1 17.2	C 5.6 3.8	B 2.2 1.5	1.0 0.7	0.4 0.3	0.2 0.1	1.8 1.2
	Dairy	C 11.6 7.9	B 1.9 1.3	M 0.6 0.4	0.2 0.2	0.1 0.1	0.1 0.0	0.7 0.5
	General	C 23.4 16.0	C 3.1 2.1	M 1.0 0.7	M 0.5 0.3	0.2 0.2	0.2 0.1	1.0 0.7
	Cash-grain	C 10.1 6.9	B 1.9 1.3	M 0.7 0.4	S 0.3 0.2	0.2 0.1	0.1 0.1	0.5 0.4
	Tobacco	C 37.7 25.8	C 3.4 2.3	B 1.6 1.1	M 0.7 0.5	S 0.3 0.2	0.2 0.1	0.6 0.4

Note: 1) The figures show the total of wage/contract labor expenditure per farm (upper section of Table 8) and 1/2 of machine hire expenditure per farm (lower section of Table 7).

2) This table is prepared on the same basis as Table 6.

Source: 1969 Census, Vol. II, Chap. 8, pp. 70-247, pp. 268-271.

indirect expenditures for hired labor by the farms in the form of expenditures for contract labor and machine hire in order to give better picture of the scale of employment of hired labor in U.S. farms, particularly for those who spend larger sums in them.

In order to proceed with such analysis, the author prepared Table 8, which was drawn up in following ways: to begin with the author made the figures in upper section in Table 8 by each type of farms, adding expenditures for contract labor per farm (the figures in upper section of Table 7) to expenditures for hired labor per farm (upper section of Table 6), and then calculated the figures in lower section on the same basis as Table 6. While the machine hire expenditures obviously include both of payment for rent of the machines and wages, it is not possible to know exact figures for both, and for this reason, the author assumed that 50% of the expenditures were for rent of machines and the rest were labor wages. On this basis 1/2 of the average expenditure for machine hire (lower section of Table 7) per farm has been added to the per farm total of wage labor and contract labor expenditures (upper section of Table 8) to develop Table 9 on the same basis as Table 6 and 8 in other respects.

If we compare these Table 8 and 9 with Table 6, it is apparent that the number of regular workers employed by Class Ia vegetable and fruit/nut farms increases more than 15 because of their larger dependence on contract labor, in comparison to the figures based on wage expenditures only. They are unquestionably very large scale capitalist farms employing about 50 hired laborers either directly or indirectly as contract labor or machine hire. "General" farms also spend much on machine hire and contract labor, and the aggregate number of regular workers used by the Class Ia farms now goes up to 20. Livestock ranchers and cash-grain farmers who do not use more than 10 regular workers on their own now come out as much more important user of hired labor.

Among those farms with sales of the \$100,000 or less, Class Ib "general" farms and Class II fruit/nut farms shown on Table 6 as big peasant farms now appear as capitalist farms on Table 8, while Class II livestock and Class III "general" farms now appear as middle peasant farms, also on Table 8, respectively.

We have already seen that in the United States, 70% of the total farm products is produced by those farms whose annual sales of products exceeds \$20,000, and who constitute either capitalist, big peasant or middle peasant operations. There are considerable differences in the degree of oligarchy, however, depending on the types of farms. For instance, Class Ia farms produce more than 70% of vegetables, while production of tobacco is shared by all farms ranking from Class Ia to IV if we use the same yardstick (70% of total output). On the other hand, farms belonging to same group of sales (i.e., same economic class) may not have the same class characteristics if their types are different. We shall therefor summarize the facts expressed in Table 8 and 9 (those figures in gothic prints), i.e., the state of primary producers in each type of farms, in the following classification:

- (a) Predominant portion of production is accomplished by capitalist farms—vegetable, "miscellaneous," "other field-crop" and fruit/nut farms.
- (b) Predominant part of production is accomplished by capitalist and big peasant

farms—livestock ranches and cotton farms.

- (c) Predominant portion of production is accomplished by capitalist, big peasant and middle peasant farms—poultry, livestock, dairy and “general” farms.
- (d) Predominant portion of production is shared by all of capitalist farms, big, middle and small peasant farms—cash-grain and tobacco farms.

However, even in the case of (d)—cash-grain and tobacco production in which small peasant farms have a good share, more than 65% of output is realized by the middle peasants and larger scale operations, and the share of small peasants and lesser scale farms in the total production is around one-third. The role of small peasants and proletarian farms is extremely small in American agriculture today, and we can conclude that in every sector of the U.S. agriculture, the capitalist and big peasant farms have unchallenged predominance in production, although the degree of concentration is not identical according to type of farms.

### VIII Conclusion

The main purpose of the author's present research has been to clarify the process of evolution in the position of large-scale farmers within U.S. agricultural structures on the whole, and at the same time, to make positive analysis concerning the class characteristics of large-scale farms in U.S.A. in consideration of the key points of arguments in the past. While the conclusions we reached have been presented for each chapter at its end, it would be worthwhile to list up the main conclusions of this research as a whole in the following manner.

First, as stated in the recent proposal concerning U.S. agricultural policy which was published by the Committee for Economic Development and titled “A New U.S. Farm Policy for Changing World Food Needs,”<sup>51)</sup> we notice that in the process of U.S. agricultural evolution in the past ten years, there has been formed two easily distinguishable sectors in U.S. farms along the boundary line of \$20,000 sales per farm. While those small number of large-scale farms who realize the annual sales of \$20,000 or more produce almost 80% of the total U.S. farm products as the result of large capital expenditures for machinery and hired labor, those two million or more smaller farms under the \$20,000 line cannot realize enough farm income to subsist from their farms alone in general, and are surviving on off-farm income from wage labor and other part-time work. Today, the two sectors constitute a very clear contrast in their positions in U.S. agriculture as a whole, and significant differences can be seen in their degree of mechanization and their employment of wage labor which determines their class characteristics as farming operations.

Second, the concentration of capital and production in large-scale farms is partially accelerated by the increase in number of those farms with the sales of \$20,000 or more,

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51) Committee for Economic Development, *A New U. S. Farm Policy for Changing World Food Needs: A Statement by the Research and Policy Committee of the Committee for Economic Development*, 1974.

but it has reached a very high degree, as we can observe commonly among industry at large, in the case of those largest-scale farms, regardless of change in their number.

Third, in those main crops strongly influenced by the production adjustment and price-support programs of the United States such as wheat, feed grains, cotton and others, public funds are pumped preferentially into those efficient, large-scale farms with sales of \$20,000 or more rather than to more numerous family farms with sales of \$20,000 or less, as we have already seen in our analysis of farm gains and Federal Government payments. Although today's federal agricultural policies seemingly emphasize protecting and fastening of family farms, these policies in reality serve to accelerate class-differentiation of peasantry and help concentration of capital and production at the small number of large-scale farms.

Fourth, the degree of mechanization of farms varies considerably according to the type of farms, but the degree of concentration of machinery and farm products is proportional to concentration of hired labor at the large-scale farms. While absolute number of hired workers decreases at the organic structure of capital in U.S. agriculture goes up to higher levels, this should not be understood to mean that machines and hired labor mutually exclude each other. For those large-scale farms in which mechanization has progressed to the highest level, concentration of hired labor also goes up quickly.

Fifth, because of the progress of agricultural machinery, the busy farming season requiring massive workers tends to become shorter for great many types of farms and to become limited to those sowing, planting or harvesting seasons, and generally speaking, the number of working days of hired laborers per year are gradually reduced. For this particular reason, wage expenditures can today express the scale of hired labor employment more accurately than the number of hired workers employed. Furthermore, a substantial part of today's farming operations are subcontracted to "agricultural services" offered by off-farm establishments through a large variety of services such as contract labor (manual work content) and machine hire (mechanized work content) quite frequently. The fees paid by such farms to the agricultural services include a portion corresponding to wages, and because of this, up-to-date analysis of hired labor must take into consideration those expenditures for contract labor and machine hire as well as wage expenditures.

Sixth, it is also a remarkable trend that the number of family workers and their length of work per year are quickly decreasing as mechanization in U.S. agriculture develops. Up to now, the main problem has been the decrease of hired workers, but we should also pay our attention to the alienation of family workers from farming. Even if the employment of hired labor is decreasing among the farms, their degree of dependence on it actually increases if the decrease in family worker is faster than that. Consequently, it would be a mistake to think that a decrease in the number of hired laborers means per se a retrogression in the capitalistic characteristics of the farm in question.

Lastly, we shall review briefly the questions of class structure and primary producers, in the U.S. agriculture which have been the main subject of discussion in Chapter VII. As the result of our analysis based on the measurement of the scale of hired labor em-

ployment by each group of farms as determined by their wage, contract labor and machine hire expenditures, we have concluded that in 1969, 2% of the U.S. farms were capitalist farms, 6% were big peasant and 12% were middle peasant farms, while the rest (80%) were either small peasant or proletarian farms. We have also concluded that the large-scale farms with the annual sales of \$20,000 or more, which are considered to be the primary producers of U.S. farm products by the Committee for Economic Development mentioned earlier, actually consist of three categories of capitalist farms (sales in excess of \$100,000), big peasants (\$40,000~\$100,000) and middle peasants (\$20,000~\$40,000), and the rest of farms whose sales of farm products smaller than \$20,000 are either small peasants or proletarian farms.

Likewise, according to our analysis of various types of farms, the capitalist and big peasant farms play the predominant role in most types of agricultural production, with occasional participation of middle peasant farms. Even in the case of tobacco and cash-grain farms in which small peasant farms play a little more important role, the share of production of small peasant and lesser category of farms is less than one-third. Therefore, we could conclude that today's agricultural production in U.S.A. is primarily represented by those three categories of farms—capitalist, big peasant and middle peasant farms, with the capitalist farms in the foremost position (however, although such capitalist farms have concentrated substantial capital and production in farming, they are naturally different in scale and the degree of concentration from capitalist industry in which there are many instances where less than ten firms, each employing several tens of thousand of workers, monopolize production of a given sector among themselves).

We have already seen that some experts in USSR define all large-scale farms as capitalist farms when their sales of farm products exceeds \$20,000, while many other researchers in U.S.A. who recognize the predominance of family farms maintain that most of the farms exceeding the \$20,000 line constitute family farms. An extreme case is Ouchi who provided the definition of "enlarged small peasant farms" as a part of the small peasant farm. All these arguments, in the opinion of the author, do not appear very realistic in the light of his analysis as presented in the present thesis.

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